C1    comprises a selected decay factor.

## REMARKS

The application has been reviewed in light of the Final Office Action dated September 21, 2001. Claims 26-45 are pending in this application. By the present Amendment, claim 45 has been amended. The amendment to claim 45 corrects informalities and is not intended to limit the scope thereof. It is submitted that no new matter has been added and no new issues have been raised by the present Amendment.

Reconsideration is respectfully requested of the rejection of claims 26-42 and 44 under 35 U.S.C. 103(a) as allegedly unpatentable over U.S. Patent No. 5,710,591 to Bruno et al. in view of Cohen et al., IEEE 1993, "Virtual Gain for audio windows". Reconsideration is respectfully requested of the rejection of claim 43 under 35 U.S.C. 103 (a) as allegedly unpatentable over Bruno et al. in view of Cohen et al. as applied to claim 26 and further in view of U.S. Patent 5,864,816 to Everett. Applicant has carefully considered the Examiner's comments and the cited art and respectfully submits that independent claims 26 and 44 are patentable over the cited art for at least the following reasons.

Independent claim 26 of the present application relates to an audio conferencing method in which audio data is received from a source audio client, attenuated based on audio decay characteristics to simulate a distance between the source audio client and a target audio client, wherein each audio client is assigned a selected decay characteristic of a plurality of predefined decay characteristics, and delivering the attenuated audio data to the target audio client.

One of the benefits of the audio conferencing method is that the audio conferencing method provides audio mixing with distance-based attenuation. According to an illustrated embodiment, this can be accomplished by implementing predefined decay characteristics for categories of sounds. These decay characteristics may be, for example, the predefined decay factors for four categories of sound illustrated in the graph of Figure 7, according to an embodiment. When audio clients are added to the conference, a decay factor of a plurality of predefined decay factors such as those illustrated in Figure 7 is specified for that audio client. Weighted values for each source audio client are extracted according to the distance between the target audio client and the source audio client using the decay factor specified for the source audio client The weighted values are stored in a mix table and utilized to perform the mixing. (Page 16, line 9 to page 18 line 5) Of course, the claims are not limited to the described embodiments.

Bruno et al., as understood by Applicant, relates to a method and apparatus for recording and indexing audio information exchanged during an audio conference call or video, audio and data information exchanged during a multimedia conference. Voice activated switching functionality of a multipoint control unit provides a video signal, which is input into the multipoint control unit from a workstation from which an audio signal is detected, to each of the other workstations in the conference. A workstation or participant-identification signal is generated by the multipoint control unit and stored with the audio signal and video information.

Cohen et al., as understood by Applicant, relates to audio windowing at a frontend, or user interface, to an audio system with a spatial sound backend. Gain adjustment is "used to

control the volume of the various sources." (Abstract, page 85) A virtual gain "can be synthesized from components derived from iconic size, distance, orientation and directivity and selectively enabled according to room-wise positioning of sources across sinks." (Sohen et al., page 85) As understood by Applicant, virtual gain can be composed into four dimensionless components including distance effects ($gain_{distance}$). (Cohen et al., p 86) The distance-dependent gain ($gain_{distance}$) can capture the effects of distance between source and sink and is defined by a set formula. (Cohen et al., page 87-88) The distant-dependent gain of Cohen et al. depends on a single formula for all audio clients. That is, in Cohen et al., the distance-dependent gain ($gain_{distance}$) is a single value at any given distance from a source. (See p. 87-88 and Figure 3).

The Examiner contends that Cohen et al. discloses that "each audio client is assigned a selected decay characteristic of a plurality of characteristics - (transferring data to multiple audio resources and letting listeners later parameters among teleconferees .." (Official Action, page 7) Applicant respectfully disagrees.

In Cohen et al., the parameters used in determining the distance dependent gain, $m$ and $c$, are functions of iconic size and a size a room in which the conference takes place. (Cohen et al., page 87) While these parameters may be varied by a user, each audio client is not assigned a selected audio decay characteristic from a plurality of predetermined audio decay characteristics.

The distant-dependent gain, $gain_{distance}$, of Cohen et al. is calculated based on a single equation or characteristic for all audio clients. (see Equation (2) on page 87 and Figure 3 on page 88).

The cited art is not understood by Applicant to teach or suggest that each audio client is assigned a selected decay characteristic of a plurality of predefined decay characteristics.

Cohen et al. employs a single, common equation in order to determine $gain_{distance}$ for all participants in a conference.(see Section 1.2)

It is respectfully submitted that amended independent claim 26 is patentable over the cited art for at least the reasons mentioned above.

It is respectfully submitted that independent claim 44 is patentable over the prior art for at least similar reasons.

As noted above, it is believed that claims 26 and 44 are patentable over the combination of Bruno et al. and Cohen et al. Further, Everett is not believed to provide any of the elements missing from Bruno et al. and Cohen et al. that would have made claims 26 and 44 obvious to one of ordinary skill in the art.

In light of the amendments and remarks made herein, it is respectfully submitted that independent claims 26 and 44 are patentable over the cited art for at least the reasons identified above.

The Office is hereby authorized to charge any additional fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition, and the Commissioner is authorized to charge the requisite fees to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner

is respectfully requested to call the undersigned attorney.

Entry of this amendment and allowance of this application are respectfully requested.


Respectfully submitted,


RICHARD F. JAWORSKI
Reg. No.33,515
Attorney for Applicant
Cooper & Dunham LLP
Tel.: (212) 278-0400

## MARKED COPY OF CLAIMS

Please amend claim 45 as follows:

45.  (Amended)    The method of claim [1] <u>26</u> wherein the selected decay characteristic comprises a selected decay factor.